



## INFORMATION DISCLOSURE STATEMENT

Applicant : Sampsell et al.  
App. No : 10/731,989  
Filed : December 9, 2003  
For : AREA ARRAY MODULATION AND  
LEAD REDUCTION IN  
INTERFEROMETRIC MODULATORS  
Examiner : Choi, William C.  
Art Unit : 2873

## CERTIFICATE OF MAILING

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

April 12, 2005  
(Date)

Mark M. Abumeri, Reg. No. 43,458

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing in the above-identified application is an Information Disclosure Statement by Applicant (PTO/SB/08 equivalent) listing 66 references to be considered by the Examiner, which includes 21 foreign patent references and non-patent literature as listed on the Information Disclosure Statement. Hardcopies of the 21 foreign and non-patent literature references are enclosed herewith.

This Information Disclosure Statement is being filed before the mailing date of a final action and before the mailing of a Notice of Allowance. This Statement is accompanied by the fees set forth in 37 C.F.R. § 1.17(p). The Commissioner is hereby authorized to charge any additional fees which may be required or to credit any overpayment to Account No. 11-1410.

04/15/2005 FMETEK11 00000029 10731989

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Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: April 12, 2005

By:

Mark M. Abumeri  
Registration No. 43,458  
Attorney of Record  
Customer No. 20,995  
(619) 235-8550

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application No. 10/731,989  
 Filing Date December 9, 2003  
 First Named Inventor Sampsell, Jeffrey Brian  
 Art Unit 2873  
 Examiner Choi, William C.  
 Attorney Docket No. IRDM.129A

(Multiple sheets used when necessary)

SHEET 1 OF 3

## U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name of Patentee or Applicant	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
	1	2,534,846	12-19-1950	Ambrose et al.	
	2	3,439,973	04-22-1969	Paul et al.	
	3	3,443,854	05-13-1969	Weiss	
	4	3,653,741	04-04-1972	Marks	
	5	3,656,836	04-18-1972	de Cremoux et al.	
	6	3,813,265	05-28-1974	Marks	
	7	3,955,880	05-11-1976	Lierke	
	8	4,099,854	07-11-1978	Decker et al.	
	9	4,228,437	10-14-1980	Shelton	
	10	4,377,324	03-22-1983	Durand et al.	
	11	4,389,096	06-21-1983	Hori et al.	
	12	4,403,248	09-06-1983	te Velde	
	13	4,445,050	04-24-1984	Marks	
	14	4,519,676	05-28-1985	te Velde	
	15	4,531,126	07-23-1985	Sadones	
	16	4,663,083	05-05-1987	Marks	
	17	4,681,403	07-21-1987	te Velde et al.	
	18	4,748,366	05-31-1988	Taylor	
	19	4,786,128	11-22-1988	Birnbach	
	20	4,790,635	12-13-1988	Apsley	
	21	4,982,184	01-01-1991	Kirkwood	
	22	5,022,745	06-11-1991	Zahowski et al.	
	23	5,044,736	09-03-1991	Jaskie et al.	
	24	5,075,796	12-24-1991	Schildkraut et al.	
	25	5,078,479	01-07-1992	Vuilleumier	
	26	5,124,834	06-23-1992	Cusano et al.	
	27	5,153,771	10-06-1992	Link et al.	
	28	5,168,406	12-01-1992	Nelson	
	29	5,231,532	07-27-1993	Magel et al.	
	30	5,233,459	08-03-1993	Bozler et al.	

Examiner Signature

Date Considered

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

T<sup>1</sup> - Place a check mark in this area when an English language Translation is attached.

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>	Application No.	10/731,989
	Filing Date	December 9, 2003
	First Named Inventor	Sampsell, Jeffrey Brian
	Art Unit	2873
(Multiple sheets used when necessary)	Examiner	Choi, William C.
SHEET 2 OF 3	Attorney Docket No.	IRDM.129A

U.S. PATENT DOCUMENTS					
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	31	5,311,360	05-10-1994	Bloom et al.	
	32	5,381,253	01-10-1995	Sharp et al.	
	33	5,401,983	03-28-1995	Jokerst et al.	
	34	5,459,610	10-17-1995	Bloom et al.	
	35	5,497,172	03-05-1996	Doherty et al.	
	36	5,500,635	03-19-1996	Mott	
	37	5,500,761	03-19-1996	Goossen et al.	
	38	5,579,149	11-26-1996	Moret et al.	
	39	5,619,059	04-08-1997	Li et al.	
	40	5,636,052	06-03-1997	Arney et al.	
	41	5,703,710	12-30-1997	Brinkman et al.	
	42	5,710,656	01-20-1998	Goosen	
	43	5,739,945	04-14-1998	Tayebati	
	44	5,784,190	07-21-1998	Worley	
	45	5,825,528	10-20-1998	Goosen	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>1</sup>
	46	AKASAKA, "Three-Dimensional IC Trends," Proceedings of IEEE, vol. 74, No. 12, pp. 1703-1714 (Dec. 1986).	
	47	ARATANI et al., "Process and Design Considerations for Surface Micromachined Beams for a Tuneable Interferometer Array in Silicon," Proc. IEEE Microelectromechanical Workshop, Fort Lauderdale, FL, pp. 230-235 (Feb. 1993).	
	48	ARATANI et al., "Surface Micromachined Tuneable Interferometer Array," Sensors and Actuators, pp 17-23 (1994).	
	49	CONNER, "Hybrid Color Display Using Optical Interference Filter Array," SID Digest, pp. 577-580 (1993).	
	50	GOOSSEN et al., "Possible Display Applications of the Silicon Mechanical Anti-Reflection Switch," Society for Information Display (1994).	
	51	GOOSSEN et al., "Silicon Modulator Based on Mechanically-Active Anti-Reflection Layer with 1Mbit/sec Capability for Fiber-in-the-Loop Applications," IEEE Photonics Technology Letters (Sep. 1994).	

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	52	GOSCH, "West Germany Grabs the Lead in X-Ray Lithography," Electronics, pp. 78-80 (Feb. 5, 1987).			
	53	HOWARD et al., "Nanometer-Scale Fabrication Techniques," VLSI Electronics: Microstructure Science, vol. 5, pp. 145-153 and pp. 166-173 (1982).			
	54	JACKSON, "Classical Electrodynamics," John Wiley & Sons Inc., pp. 568-573 (date unknown).			
	55	JERMAN et al., "A Miniature Fabry-Perot Interferometer with a Corrugated Silicon Diaphragm Support," IEEE Electron Devices Society (1988).			
	56	JOHNSON "Optical Scanners," Microwave Scanning Antennas, vol. 1, pp. 251-261 (1964).			
	57	"Light over Matter," Circle No. 36 (Jun. 1993).			
	58	MILES, "A New Reflective FPD Technology Using Interferometric Modulation," Society for Information Display '97 Digest, Session 7.3.			
	59	Newsbreaks, "Quantum-trench devices might operate at terahertz frequencies," Laser Focus World (May 1993).			
	60	OLINER et al., "Radiating Elements and Mutual Coupling," Microwave Scanning Antennas, vol. 2, p. 131-194 (1966).			
	61	RALEY et al., "A Fabry-Perot Microinterferometer for Visible Wavelengths," IEEE Solid-State Sensor and Actuator Workshop, Hilton Head, SC (1992).			
	62	SPERGER et al., "High Performance Patterned All-Dielectric Interference Colour Filter for Display Applications," SID Digest, pp. 81-83 (1994).			
	63	STONE, "Radiation and Optics, An Introduction to the Classical Theory," McGraw-Hill, pp. 340-343 (1963).			
	64	WALKER, et al., "Electron-beam-tunable Interference Filter Spatial Light Modulator," Optics Letters vol. 13, No. 5, pp. 345-347 (May 1988).			
	65	WINTON, John M., "A novel way to capture solar energy," Chemical Week, pp. 17-18 (May 15, 1985).			
	66	WU, "Design of a Reflective Color LCD Using Optical Interference Reflectors," ASIA Display '95, pp. 929-931 (Oct. 16, 1995).			

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